

## **ABSTRACT**

The present invention relates to the polypeptides known as calcineurin associated protein (calsarcin). Calsarcins-1, -2, and -3 bind to calcineurin, telethonin, and  $\alpha$ -actinin, which provides a link between these molecules and the sarcomere. Sarcomeric dysfunction ultimately 5 leads to activation of calcineurin and consequent hypertrophic cardiomyopathy. Thus, methods utilizing calsarcin as it regards these medical conditions are herein provided and include screening for peptides which interact with calsarcin, screening for modulators of calsarcin binding to calcineurin or  $\alpha$ -actinin, methods to modulate calcineurin activity, methods to inhibit calcineurin activation of gene transcription and methods for treating cardiac hypertrophy, heart 10 failure and Type II diabetes.